



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/727,164

12/02/2003

Simon Robert Walmsley

PEA19US

6693

24011 7590 09/29/2008  
SILVERBROOK RESEARCH PTY LTD  
393 DARLING STREET  
BALMAIN, 2041  
AUSTRALIA

EXAMINER

POWERS, WILLIAM S

ART UNIT

PAPER NUMBER

2134

MAIL DATE

DELIVERY MODE

09/29/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/727,164	<b>Applicant(s)</b> WALMSLEY, SIMON ROBERT	
	<b>Examiner</b> WILLIAM S. POWERS	<b>Art Unit</b> 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-7 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/1/2008 has been entered.

### ***Response to Arguments***

2. Applicant's arguments are directed to newly added amendments which are addressed below.

### ***Response to Amendment***

3. The Examiner has stated the below column and line numbers as examples. All columns and line numbers in the reference and the figures are relevant material and Applicant should be taken the entire reference into consideration upon the reply to this Office Action.

4. Claims 2 and 3 have been amended.
5. Claims 1 and 11-14 have been withdrawn from consideration.
6. Claims 8-10 have been cancelled.
7. Claims 2-7 and 15-18 are pending.

### ***Specification***

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Information Disclosure Statement***

9. The IDS submitted 9/9/2008 has been considered by the Examiner.

### ***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 2134

11. Claims 2 and 3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Applicant has provided a citation; paragraphs [7120]-[7236] of the Specification, for support for the amendments, but the Examiner cannot find any support for the amendments of either claim at the indicated positions. Specifically, the Examiner can find no evidence in the cited passages that the updating of the security fields with a first message is indicative of an action taking place and that the updating of the security fields with a second message is indicative of the action not taking place. Similarly, the Examiner can find no evidence in the cited passages for values in first message that allow the writing of a first data value and values in a second message that do not allow the writing of the first data value. To overcome the rejection the Examiner requires more specific citations along with the Applicant's interpretation of the specification as it relates to the amended claims.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 2, it is not clear from the claim language or the Specification how the updating of the security fields indicates that an action has been performed and also indicates that the action has not been performed. The second message is only sent if the first message is unsuccessful and if the first message is unsuccessful, the action in the first message would not have been performed. Therefore, if the second message is sent then that is indicative that the action in the first message has not been performed.

As to claim 3, it is not clear from the claim language or the Specification how the first and second security values allow writing of the first data value and the third and fourth data values do not allow the writing of the first data value. The second message is only sent if the first message is unsuccessful and if the first message is unsuccessful, the first data value in the first message would not have been written. Therefore, if the second message is sent then that is indicative that the first data value in the first message has not been written.

### ***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2134

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 2-7 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 7,031,012 to Serizawa in view of US Patent No. 5,315, 635 to Kane et al. (hereinafter Kane).

As to claim 2, Serizawa teaches:

- a. Sending a first message to the target entity, the first message being configured to cause the entity to perform an action and to update the first and second security fields to indicate the action has been performed (the amount of toner is written to address No. 5 (an action), service life expiration is written to address No. 6 and a memory lock is written to address No. 8 (security fields) with the memory lock indicating that the amount of toner has been updated) (Serizawa, column 7, lines 19-28).
- b. Sending a second message to the target entity, the second message being configured to cause the entity to update the first and second security fields to indicate that the action has not been performed (once a memory lock has

occurred, any subsequent command or message to write to the memory is prohibited) (Serizawa, column 6, line 50-col. 7, line 29).

c.       Wherein in the security field have write restrictions associated with them such that updating the security fields in accordance with the first message prevents subsequent updating of the security fields in accordance with the second message , and wherein updating the security fields in accordance with the second message prevents subsequent updating of the security fields with the first message, and wherein the first action is only performed when updating the security fields by the first message is successful (Serizawa, column 7, lines 1-29).

Serizawa does not expressly mention only sending the second message if the first message is unsuccessful. However, in an analogous art, Kane teaches the second message is only sent when sending of the first message is unsuccessful (determining that a message was not received which indicates that the first action of the first message has not occurred and requesting the re-sending of the un-received message) (Kane, col. 7, lines 9-63).

Therefore, one of ordinary skill in the art at the time the invention was made would have been motivated to implement the printing apparatus that controls write messages of Serizawa with the message control system of Kane in order to ensure that message reliability as suggested by Kane (Kane, col. 7, lines 28-35).

As to claim 3, Serizawa teaches:



- a. Each of the first and second security fields has a monotonically changeable write restriction associated with it (address Nos. 7 and 8 have write restrictions associated with them) (Serizawa, column 6, lines 9-21).
- b. The first attempted write included a first data value for the data field and first and second security values for the first and second security fields respectively which allow writing of the first data value (commands include the amount of toner left in cartridge and the service life of the cartridge) (Serizawa, column 6, lines 27-40).
- c. The method including the step of sending a second write to the target entity, the second write including third and fourth security values for the first and second security fields respectively which do not allow writing of the first data value, wherein the write restrictions are such that application of the third and fourth security values to the first and second fields are mutually incompatible with application of the first and second security values to the first and second security fields, such that if any of the fields cannot be written to, none of them are written to (once a memory lock has occurred, any subsequent command or message to write to the memory is prohibited) (Serizawa, column 7, lines 1-29).

Serizawa does not expressly mention only sending the second message if the first message is unsuccessful. However, in an analogous art, Kane teaches the second message is only sent when sending of the first message is unsuccessful (determining that a message was not received which indicates that the writing of the first data value

Art Unit: 2134

of the first message has not occurred and requesting the re-sending of the un-received message) (Kane, col. 7, lines 9-63).

Therefore, one of ordinary skill in the art at the time the invention was made would have been motivated to implement the printing apparatus that controls write messages of Serizawa with the message control system of Kane in order to ensure that message are reliability as suggested by Kane (Kane, col. 7, lines 28-35).

As to claim 4, Serizawa as modified teaches:

- a. Prevent the second write from being performed if the event that the first write was previously performed (once a memory lock has occurred, any subsequent command or message to write to the memory is prohibited) (Serizawa, column 7, lines 1-29).
- b. Prevent the first write from subsequently being performed in the event that the second write is performed (once a memory lock has occurred, any subsequent command or message to write to the memory is prohibited) (Serizawa, column 7, lines 1-29).

As to claims 5-7, Serizawa as modified teaches that the second message is only sent after the first message is determined to not have been delivered (when a message is not received a notification is sent to the sending unit and the message is re-transmitted) (Kane, col. 7, lines 9-63).

As to claim 15, Serizawa as modified teaches the target entity is a first integrated circuit and the messages are sent by a second integrated circuit (printer engine controller and non-volatile memory on toner cartridge) (Serizawa, column 4, line 66-column 5, line 44).

As to claim 16, Serizawa as modified teaches the second integrated circuit is a printer controller (engine controller) ((Serizawa, column 4, line 66-column 5, line 44).

As to claim 17, Serizawa as modified teaches the first integrated circuit is installed in a cartridge that is releasably attachable to a printer in which the printer controller is installed, such that the messages can be sent via a communications link between the printer controller and cartridge (the toner cartridge has a non-volatile memory that is in communication with the printer engine controller) (Serizawa, column 4, line 66-column 5, line 44).

As to claim 18, Serizawa as modified teaches the data field stores an indicator of ink remaining in the cartridge (non-volatile memory of the toner cartridge has (Serizawa, column 4, line 66-column 5, line 44).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM S. POWERS whose telephone number is (571)272-8573. The examiner can normally be reached on m-f 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571 272 3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. S. P./  
Examiner, Art Unit 2134

William S. Powers  
Examiner  
Art Unit 2134

9/25/2008

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2134